

IMPROVED BRA CUP PADDING STRUCTURE

BACKGROUND OF THE INVENTION

5 **1. Field of the invention**

The invention relates an improved bra cup padding structure, and in particular, to a reusable improved bra cup padding characterized in that its inner surface or exterior surface is provided with a self-adhesiveness such that said bra cup padding can adhere securely against the bra or upon the female breast, thereby it
10 will not displace due to the fluctuation of breasts.

2. Description of the prior art

Conventional bra such as those disclosed in the Applicant's ROC patent No. 412932, titled "Functional Bra" comprised essentially a silicone gel bra cup padding separately stitched at both bra cups of a bra, wherein said silicone gel bra
15 cup padding was consisted of a silicone gel body, a PU film and a cloth for stitching, whereby said PU film could clad said silicone gel body, and after evacuating inside of said PU film, these were sealed by heating with high frequency microwave. Finally, the stitching cloth was firmly fitted against the thus-sealed silicone gel body in order to stitch securely said silicone bra cup
20 padding upon the bra. The prior art functional bra was characterized in that said silicone gel body was in a form having a thin upper part and a thick lower part, and that a groove was provided at the lower periphery of the bra cup padding, which, after being enclosed with said PU film, was heat sealed by high frequency microwave to yield a silicone gel bra cup padding.

25 According to this prior art, the above-described bra cup padding having a thin

upper part and a thick lower part is primarily to be bound over a bra in order to fix the bra cup padding at its position in a manner that it can lift the female breast and acts as a breast support giving female breast a firm and ample appearance as well as a more beautiful chest curve. However, if the bra cup padding is used alone
5 without stitching over the bra, the bra cup padding will displace due to the continual movement of the female breast such that one can find at a glance that there is a bra cup padding over the female breast. This situation in practical application has surely to be improved.

Accordingly, the above-described prior art product is not a perfect design and has
10 still many disadvantages to be solved

The inventor has notice the various disadvantages associated with the conventional bra cup padding and thought to improve it, and after having carried out an intensive study for many years, has successfully developed the improved bra cup padding structure of the invention.

15

SUMMARY OF THE INVENTION

An object of the invention is to provide an improved bra cup padding structure characterized in that the bra cup padding can adhere directly and securely against
20 the bra or over the female breast in order to fix the bra cup padding at its position, thereby it will not displace due to the moving of the breast such that it can lift the female breast and acts as a breast support giving female breast a firm and ample appearance as well as a natural chest curvature.

Another object of the invention is to provide an improved bra cup padding
25 structure characterized in that it comprises a self-adhesive flexible silicone gel

film over the silicone gel bra cup padding, the cloth bra cup padding or the like, thereby once upon sticking on the clothing, the skin or the film itself, it can be peeled away and reused readily.

5 The improved bra cup padding structure that can accomplish the above-mentioned objects comprises essentially of coating a layer of self-adhesive flexible silicone film over the inner surface or exterior surface of an ordinary silicone gel bra cup padding or cloth bra cup padding so as to provide said bra cup padding an self-adhesive inner surface or exterior surface such that the bra cup padding can adhere tightly against the bra or over the female breast, thereby the bra cup padding will
10 not displace due to the fluctuation of the breast and hence the bra cup padding can be fixed at its position in a manner that it can lift the female breast and acts as a breast support giving female breast a firm and ample appearance as well as a chest of natural curvature and elasticity; that the bra cup padding can be folded and packaged; and that, since said self-adhesive film is made of a silicone gel through
15 unsaturated cross-linking, the coating will not stick each other and once upon adhering against clothes, the skin or the film itself, it can be peeled away and reused readily without damaging the object being stuck or the film itself.

BRIEF DESCRIPTION OF THE DRAWINGS

20

The drawings disclose an illustrative embodiment of the present invention which serves to exemplify the various advantages and objects hereof, and are as follows:

Figure 1 is a schematic view of an embodiment of the improved bra cup padding structure according to the invention;

25 Figure 2 shows schematically the practice of the improved bra cup padding

structure according to the invention;

Figure 3 is a schematic view showing the practice of the improved bra cup padding structure according to the invention as well as the association of the bra cup padding with the female chest;

- 5 Figure 4 is a schematic view of another embodiment of the improved bra cup padding structure according to the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

10

Referring to Fig. 1 and 2, a schematic view shows an embodiment of the improved bra cup padding structure provided by the invention. The improved bra cup padding structure is produced by coating a uniform self-adhesive flexible silicone gel film 2 over the inner surface of a finished product of flexible silicone gel bra cup padding 1 or cloth bra cup padding or other type of bra cup padding so as to impart the inner surface of the bra cup padding 1 a self-adhesiveness. Said flexible silicone gel 2 is produced by molding and curing a polysiloxane polymer composition with following main components and by a process as follow:

15 component 1 being a polyvinylsiloxane polymer, having a viscosity in a range of 100 CST to 100,000 CST, ideally, in a range of 1,000 CST to 50,000 CST;

component 2 being a polysiloxane polymer, having a viscosity of less than 5,000 CST, ideally, in a range of 25 CST to 500 CST at room temperature, and having at least one Si-H bond in each molecule; and

component 3 being a platinum catalyst;

25 whereby said three components are mixed and heated to 70°C - 150°C, ideally, to

120°C, to cure and form a self-adhesive flexible silicone gel film. Colorants and fillers can be added during mixing said components for coloring and increasing strengths of the product.

Thus, by coating the thus produced self-adhesive flexible silicone gel film 2
5 uniformly over the inner surface of the bra cup padding 1, the inner surface of the bra cup padding 1 can be imparted with self-adhesiveness. Since said self-adhesive flexible silicone gel film 2 is produced by curing through unsaturated cross-linking, it will not adhere each other such that, once upon sticking a clothes or a skin, or folding over themselves, it can be peeled away and reused readily
10 without damaging the object being stuck or the film itself

Referring to Fig. 3, a schematic view shows the practice of the improved bra cup padding structure. By virtue of the self-adhesiveness imparted on the bra cup padding 1, the bra cup padding 1 can conform tightly to the skin of a female chest 3 and will not displace due to the continual movement of the chest 3. Furthermore,
15 it can intimately clad the female chest 3 to let the wearer almost forgetting its existence as if it was fused in an integral identity with the chest 3. In addition, since the bra cup padding 1 can be a form of a thin upper part and a thick lower part, it can lift and concentrate the female chest 3 so that the chest 3 can be firmer and the size and curve of the body can be smoother and more natural and hence
20 achieves the effect of achieving an ample breast to an extent that one can not notice the existence of the bra cup padding 1 from the outer appearance. Further, by lifting and concentrating the chest 3 through the bra cup 3, the female clothes can have more choice and the perfect and elegant female curve can be presented completely without the assistance of a traditional bra.

25 Referring to Fig.4, a schematic view shows another embodiment of the improved

bra cup padding structure according to the invention. In this embodiment, the self-adhesive flexible silicone gel film 2 is coated over the exterior surface of a bra cup padding 1 in a manner that the film 2 can stick and fix inside the two bra cups of the bra 4. As a result, when the user wears the bra 4, the bra cup padding 1 can conform intimately to the bra 4 and will not displace due to continual moving of the chest achieving the purpose of comfortable in wearing a bra. Further, the bra cup padding 1 can be in a form of thin upper part and thick lower part such that the bra 4 can be converted into a magic bra giving the female chest 3 a firmer and ample appearance and more perfect size and curve. If the user does not use the bra cup padding 1, the bra 4 can return into an ordinary bra 4 by just peeling the bra cup padding 1 from the bra cup 3 and as a result, the user has more choice in buying a bra 4 without restricting just by a magic bra.

Said self-adhesive flexible silicone gel film 2 can be, of course, coated over both inner and exterior surfaces of the bra cup padding 1 depending on user's need of sticking over the skin of the chest 3 or over the inner surface of the bra cup of the bra 4.

The improved bra cup padding structure has further several following advantages over the above-recited patent and other conventional techniques:

1. The improved bra cup padding structure according to the invention comprises coating a self-adhesive, cross-linked flexible silicone gel film over a finished flexible silicone bra cup padding, a cloth bra cup padding or other type of bra cup padding such that, once upon sticking on a clothing, the skin or the film itself, it can be peeled off and reused readily achieving the purpose of repeating use.
2. The improved bra cup padding structure according to the invention can stick

firmly over the female breast or the bra in a manner that it can conform intimately against the skin of a human body, produces an elastically and regularly moving sense in accordance with the rhythm of human body without displacement due to the continual moving of the breast and lets the user forget almost its existence
5 achieving the purpose of comfortable in wearing it.

Many changes and modifications in the above described embodiment of the invention can, of course, be carried out without departing from the scope thereof. Accordingly, to promote the progress in science and the useful arts, the invention is disclosed and is intended to be limited only by the scope of the appended claims.